



A Spoonful of Sugar

Guidelines for Supervising Teachers

Preparing for Your Visit: It is strongly recommended that supervising staff should arrange a pre-visit to familiarise themselves with facilities at the Museum. Complimentary tickets are available on request in order to assist with planning and risk assessments. A Hazard Identification Sheet is provided to help you with your risk assessment.

Practicalities:

- **Where to go and how to get there:** A Spoonful of Sugar will start in W Smith's Chemists Shop. To get there, take the tram to the Town stop and then walk down the street to the Shop. Alternatively, you can walk to the Town, but please note the time it will take to walk from the entrance if you have an activity booked at 10.30am.
- **Arriving on Time:** Please ensure you arrive at the Chemist Shop on time. If you are booked on the first session of the day it is advisable to go straight there. In the event of a late arrival every effort will be made to accommodate the full time of the activity, however, due to other bookings this may not be possible.
- **What to Bring/Where:** Pupils will need appropriate clothing. Beamish is an open air museum and so is open to the weather. You do not need any equipment for this activity.
- **Toilets:** The nearest toilets suitable for a large group are located next to the Bank, beside the tram stop. A smaller toilet facility is located on the ground floor of the Masonic Hall.
- **Health and Safety Information:** A Hazard Identification Sheet will be provided with your booking in order to advise you of any possible risks or hazards.
- **Access:** The Museum has an access bus for any visitors with access needs to assist with transported around the site.

Objectives of Activity:

The activity aims to have participants:

- Recognise that indigestion is a problem that exists in the patient and that an answer can be researched and investigated using scientific methods.
- Plan a fair investigation using the resources available, and implement this plan to test each potential solution.
- Evaluate the effectiveness of each indigestion treatment and determine which is most helpful to the patient.

Outline of Activity:

The session will involve pupils investigating different remedies for indigestion. The activity will be introduced by the chemist from the W Smith Chemist Shop, who has a customer that is suffering from a stomach complaint known as indigestion. They propose that the group will carry out an investigation to test to see which would be the best remedy to offer the customer as the chemist is unsure what to suggest.

Pupils will work in teams of three to discuss, plan and carry out a series of neutralisation reactions. They will be provided with some weak 'stomach' acid and asked to see which of the possible treatments works best to neutralise this. They will use Universal indicator solution to watch the pH change. After carrying out the investigations, pupils will then decide which treatment works best and pass this recommendation to the chemist.

Contact us:

If you have any queries please do not hesitate to contact Simon Woolley, Head of Learning on 0191 370 4011 OR email education@beamish.org.uk



Hazard Identification Sheet: A Spoonful of Sugar

Potential Hazard	Who is particularly at risk	Context of hazard and steps to be taken by accompanying adults to prevent accidents	Risk of accident/dangerous occurrence High/medium/low	If high or medium what additional precautions or measures need to be taken to reduce risk to low
Museum Room				
Slips, trips and falls - uneven ground surfaces, rails, low lighting levels, furniture and table coverings.	Children/Adults	The activity will take place in the W Smith Chemist shop and the Museum Room. Floor surfaces can become slippery if there are any spills during the activity. All participants to report any spills and Beamish staff will have appropriate materials to clean up. Supervising adults should ensure that children are wearing sturdy footwear and watch them carefully to prevent trips. Beamish staff will highlight fixed hazards, remind participants to be careful and take all due precautions to ensure that conditions are kept safe.	Low	
pH Universal indicator solution – harmful if inhaled, causes severe eye irritation, causes skin irritation, causes gastrointestinal irritation if ingested	Children/adults	Pupils advised not to consume or smell the solution. Pupils issued with a minimum volume. All participants to wear eye protection during the practical investigations, and will be briefed on the safe use of the solution. Any spillages on the skin to be dealt with by sending those affected to the hand washing facilities in the toilets in the Masonic Hall.	Medium	Beamish staff to have received a full briefing of handling Universal indicator solution. Access to the solution restricted to staff who deliver the activity.

Acid solutions – 0.1M Hydrochloric acid Citric acid solution	Children and adults	Pupils advised not to consume or smell the solution. Pupils issued with a minimum volume. All participants to wear eye protection during the practical investigations, and will be briefed on the safe use of the solution. Any spillages on the skin to be dealt with by sending those affected to the hand washing facilities in the toilets in the Masonic Hall.	Medium	Beamish staff to have received a full briefing of handling hydrochloric acid solution. Access to the solution restricted to staff who deliver the activity.
Trams and buses crossing	Children and Adults	As part of the session pupils will cross The Town street where there will be trams, buses and possibly horse drawn vehicles. Supervising school adults should supervise their group closely at all times.	Low	
Powders in general – allergies, asthmatic reactions etc	Children and adults	Beamish staff to ensure good ventilation in the working space available. Quantities available to groups are relatively small. Encourage children not to inhale powders in the box, no matter how harmless they think they are. Teachers to make Beamish staff aware of any children with known allergies.	Low	
Cuts from broken glass bottles	Children and adults	Advise participants to take care with the glass bottles to avoid them breaking. Any incidents that occur involving broken glass to be reported to the Beamish member of staff immediately, who will clean it away.	Low	

All children and adults must wash their hands on completion of the activity. Toilets and hand washing facilities are provided along the Town street, next to the tram stop.

Date Reviewed: 23rd March 2016 **Author:** Helen Talbot, Learning Co-ordinator (STEM)